

Amendments to the Claims:

The following is a listing of claims in the Application.

Listing of Claims:

Claims 1-34 and 39-54 (cancelled).

Claims 35-38 (allowed).

Claims 55-64 (new).

IN THE CLAIMS:

Please cancel without prejudice Claims 31-34 and 39-54.

The following Claims 35-38 were allowed:

Claim 35 (Allowed). A method of testing at least two distinctive ionic conductive liquids flowing in a milk line system at different times comprising measuring the flow of electrical current between a pair of electrodes in said system when said liquid is milk to determine the wholesomeness of the milk and, when the liquid is a fluid that contains hydrogen peroxide, to determine the completeness of the rinsing process in said milk line system.

Claim 36 (Allowed). A method in accordance with Claim 35, wherein said milk line system includes a plurality of teat cups, milk from each said teat cup being received in a separate milk line, further electrodes comprising a further pair of electrodes in each said milk line, each said pair of electrodes separately transmitting data to a computer as to the wholesomeness of milk in each corresponding said milk line during the milking operation and further transmitting data to said computer during a rinsing operation concerning the completeness of the rinsing process of each said milk line.

Claim 37 (Allowed). A method in accordance with Claim 36, including the step of securing all but of one of said milk lines during the rinsing operation so that only one of said milk lines is being rinsed at a time in succession.

Claim 38 (Allowed). A method in accordance with Claim 35, comprising maintaining the temperature of said rinsing fluid at a constant temperature during the milking operation.

Please add the following new Claims 55-64:

Claim 55. In an automated milking system wherein the milking is accomplished by a milking robot, an automated method of cleaning a dairy farm milk line system wherein the

cleaning fluid applied to the interior parts of the milk line system used for cleaning said milk line system is composed of hydrogen peroxide.

Claim 56. A method in accordance with Claim 55, wherein said hydrogen peroxide as applied to said internal parts has a strength of about three percent to eight percent of hydrogen peroxide by weight, the remainder of the cleaning fluid being essentially water.

Claim 57. In an automated milking system where the milking is accomplished by a milking robot, an automated method of cleaning a dairy farm milk line system by causing a cleaning fluid to flow therethrough, said cleaning fluid flowing through said milk line system being composed of peracetic acid as an equilibrium product obtained by mixing hydrogen peroxide with an acetic acid.

Claim 58. A method of cleaning a dairy farm milk line system in accordance with Claim 57, wherein said peracetic acid is in a range of five to fifteen percent by weight, the balance being essentially water.

Claim 59. In an automated milking system wherein the milking is accomplished by a milking robot and the milk line system is automatically cleaned based on a predetermined criteria, a method of determining the extent to which a milk line system is cleaned by a fluid containing hydrogen peroxide comprising maintaining said hydrogen peroxide containing fluid at a selected temperature and measuring it in one or more places in the milk line system to determine the electric conductivity of said hydrogen peroxide containing fluid as it is flowing therethrough, and determining the purity of said hydrogen peroxide containing fluid at said one or more places in the milk line system based on the electric conductivity of said hydrogen peroxide containing fluid at the place or places so measured.

Claim 60. A method in accordance with Claim 59, wherein said electric conductivity of said hydrogen peroxide fluid is measured in a plurality of said places at which said milk line system is the most susceptible to contamination.

Claim 61. A method in accordance with Claim 59, wherein said electric conductivity of said hydrogen peroxide containing fluid is measured in lines which interconnect teat cups with a collection vessel.

Claim 62. A method in accordance with Claim 59, wherein the concentration of hydrogen peroxide containing fluid present in the cleaning fluid is determined by said measurement of the electric conductivity of said hydrogen peroxide containing fluid.

Claim 63. A method in accordance with Claim 59, wherein said hydrogen peroxide containing fluid is initially in a range of three to eight percent hydrogen peroxide by weight.

Claim 64. A method in accordance with Claim 59, wherein said hydrogen peroxide containing fluid further contains a peracid.